

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 July 2004 (01.07.2004)

PCT

(10) International Publication Number
WO 2004/055644 A3

(51) International Patent Classification⁷: E04H 6/10, 14/00

(21) International Application Number:
PCT/US2003/039804

(22) International Filing Date:
15 December 2003 (15.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/432,709 13 December 2002 (13.12.2002) US

(71) Applicant and

(72) Inventor: GUSTAFSON, Thomas, R. [US/US]; 15725
Boeing Court, Wellington, FL 33414 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

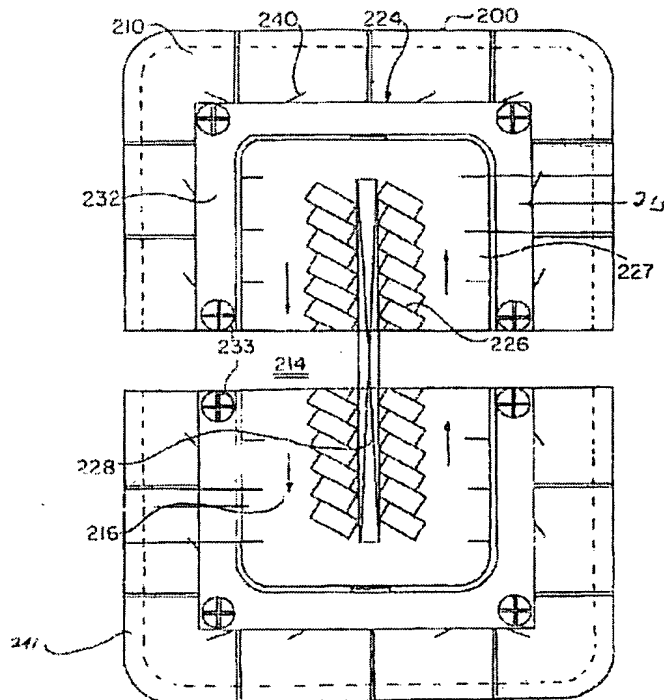
(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(74) Agent: SILVERMAN, Melvin, K.; Silverman Santucci, LLP, 500 West Cypress Creek Road, Suite 500, Ford Lauderdale, FL 33309 (US).

Published:
— with international search report
— with amended claims and statement

(Continued on next page)

(54) Title: MIXED-USE PEDESTRIAN-ORIENTED PARKING STRUCTURE



(57) Abstract: A mixed-use pedestrian-oriented parking structure includes at least two sequential multi-level parking units (216); a series of one-directional parking access aisles: angled parking (226) around a central atrium (228) and parallel parking (227) at the outer edge of the parking decks (216); a liner building (210, 212) surrounding the parking units (216) on at least one side of each parking unit (216); and a multi-use buffer corridor (232) defining an interface between the parking units (216) and the liner building (210, 212) which includes at least one common wall with the buffer corridor (232), the wall including passages for access to and from the buffer corridor (232).

WO 2004/055644 A3



(88) Date of publication of the international search report:

10 February 2005

Date of publication of the amended claims and statement:

7 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

AMENDED CLAIMS

[received by the International Bureau on 14 February 2005 (14.02.2005);
claims 1 and 11 are amended; claims 5 and 15 are cancelled; the remaining claims are
unchanged (4 pages);]

+ Statement

Claim 1 (Currently Amended): A mixed-pedestrian-oriented parking structure,
comprising:

- (a) At least two sequential multi-level parking units, each having one-directional parking access aisles, at least one of said units provided with a central solid rectangular atrium provided within at least one of said parking units;
- (b) a liner building surrounding said parking units on at least one side of each of said sequential multi-level parking unit; and
- (c) a multi-use buffer corridor defining an interface between said parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said wall including means for access to and from said buffer corridor.

Claim 2 (Original): The structure as recited in Claim 1, further comprising:
at least one exterior pedestrian-oriented corridor between at least one set of said sequential parking units.

Claim 3 (Original): The parking structure as recited in Claim 2, in which said pedestrian-oriented corridor comprises a ground level corridor.

Claim 4 (Original): The parking structure as recited in Claim 2, further comprising:
an interior pedestrian corridor, transverse to said exterior corridor, said interior corridor substantially bisecting said at least two parking units.

Claim 5 (Cancelled): The structure as recited in Claim 1, further comprising:
a central atrium provided within at least one of said parking units.

Claim 6 (Original): The structure as recited in Claim 2, further comprising:
a central atrium provided within the parking units.

Claim 7 (Original): The parking structure as recited in Claim 1 in which said buffer corridor includes HVAC facilities.

Claim 8 (Original): The parking structure as recited in Claim 2, in which said buffer corridor includes HVAC facilities.

Claim 9 (Original): The structure as recited in Claim 6, in which said parking units each comprise:

means for angled parking on a parking deck of each unit, situated about said central atrium.

Claim 10 (Original): The structure as recited in Claim 9 in which said parking units each further comprise:

means for parallel parking along an outer edge of a parking deck of each unit.

Claim 11 (Currently Amended): A mixed-use pedestrian-oriented parking structure, comprising:

(a) at least two multi-level parking units, each having one-directional parking access aisles, at least one of said parking units provided with a central solid rectangular atrium; and

(b) a liner building surrounding said parking units on at least two sides of each parking unit, said liner building including at least one common wall with said parking units, said wall including means for access to and from said liner building.

Claim 12 (Original): The structure as recited in Claim 11, further comprising:
at least one pedestrian-oriented corridor between at least one set of said sequential parking units.

Claim 13 (Original): The parking structure as recited in Claim 11, in which said pedestrian-oriented corridor comprises a ground level corridor.

Claim 14 (Original): The parking structure as recited in Claim 13, further comprising an interior pedestrian corridor, transverse to said ground level corridor and substantially bisecting said at least two parking units.

Claim 15 (Cancelled): The structure as recited in Claim 12, further comprising:
a central atrium provided within the parking units.

Claim 16 (Original): The parking structure as recited in Claim 12, further comprising:
a multi-use buffer corridor defining an interface between parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said walls including means for access to and from said liner building.

Claim 17 (Original): The structure as recited in Claim 16 in which buffer corridor includes HVAC facilities.

Claim 18 (Original): The structure as recited in Claim 12, in which said linear building includes at least one corridor contiguous with said at least one common wall.

Claim 19 (Original): The structure as recited in Claim 10, further comprising:
a cross-over ramp between said sequential parking units.

Claim 20 (Original): The structure as recited in Claim 12, in which said parking
units each comprise:

means for angled parking on a parking deck of each unit, situated about said
central atrium.

21 (Original): The structure as recited in Claim 11, in which said parking units
each further comprise:


means for parallel parking along an outer edge of a parking deck of each unit.

STATEMENT UNDER ARTICLE 19(1)

The associated Amendment sets forth the invention in terms which better define over Category X document U.S. 1,830,518A (Mason). More particularly, the structure of Mason does not teach a parking structure having a central solid rectangular atrium 228 within at least one of its parking units. That is, the structure of Mason does not teach the use of atriums. (See Applicant's Figs. 1 and 2), nor does it teach multi-level parking units having one-directional parking access aisles. As may be noted in Figs. 9-14 of Mason, that structure contemplates a bowl-like or terraced relationship between successive levels thereof, this in distinction to Applicant's structure which employs a narrow solid rectangular atrium 228 at the center of its units. Further, Mason teaches

two directional parking access aisles meaning that parking occurs transversely or normal to the direction of travel of vehicles within the parking structure. In distinction, the Applicant's single direction access aisles requires that internal parking (see Fig. 1 of Drawings) be either angled or parallel relative to the direction of travel. Also, the one-directional nature of Applicant's structure requires that a user enter at point 213 of first unit 200 and, to exit, use a second floor cross-over to 204 to reach parking unit 202, and to exit therefrom at point 217 (see Figs. 2 and 3). Further, Applicant's structure reserves second floor cross-over 204 for mixed use, unlike Mason. Finally, the structure of Mason is not designed, nor does it address, a pedestrian walking environment therein.

Respectfully submitted,
THOMAS F. GUSTAFSON

BY 
Melvin K. Silverman
Reg. No. 26,234

500 WEST CYPRESS CREEK ROAD
SUITE 500
FORT LAUDERDALE, FL 33309
TELEPHONE: (954) 351-7474
FACSIMILE (954) 492-0087

Claim 12 (Original): The structure as recited in Claim 11, further comprising:
at least one pedestrian-oriented corridor between at least one set of said sequential parking units.

Claim 13 (Original): The parking structure as recited in Claim 11, in which said pedestrian-oriented corridor comprises a ground level corridor.

Claim 14 (Original): The parking structure as recited in Claim 13, further comprising an interior pedestrian corridor, transverse to said ground level corridor and substantially bisecting said at least two parking units.

Claim 15 (Cancelled): The structure as recited in Claim 12, further comprising:
a central atrium provided within the parking units.

Claim 16 (Original): The parking structure as recited in Claim 12, further comprising:

a multi-use buffer corridor defining an interface between parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said walls including means for access to and from said liner building.

Claim 17 (Original): The structure as recited in Claim 16 in which buffer corridor includes HVAC facilities.

Claim 18 (Original): The structure as recited in Claim 12, in which said linear building includes at least one corridor contiguous with said at least one common wall.

Claim 19 (Original): The structure as recited in Claim 10, further comprising:
a cross-over ramp between said sequential parking units.

Claim 20 (Original): The structure as recited in Claim 12, in which said parking
units each comprise:

means for angled parking on a parking deck of each unit, situated about said
central atrium.

21 (Original): The structure as recited in Claim 11, in which said parking units
each further comprise:

means for parallel parking along an outer edge of a parking deck of each unit.

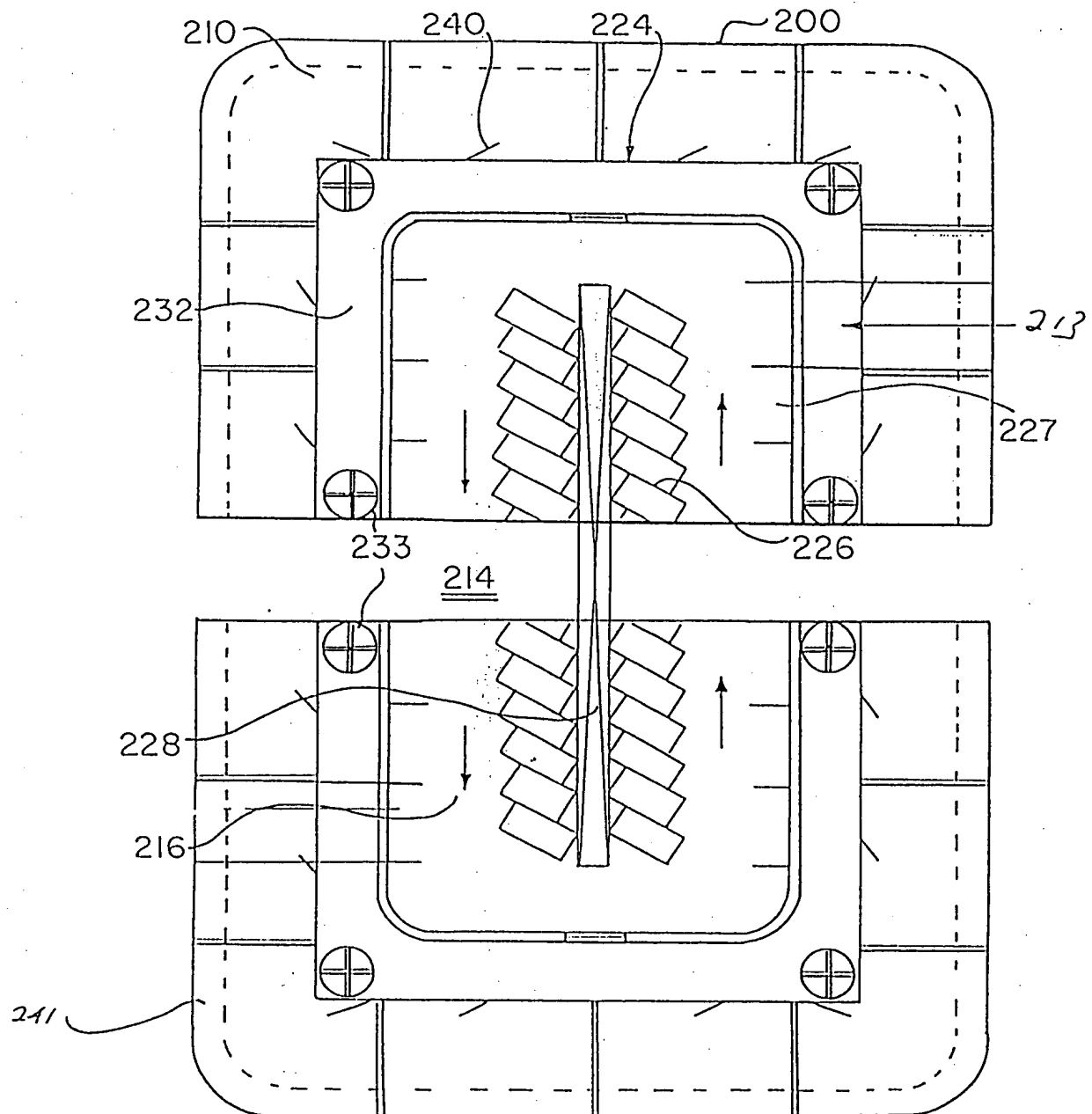
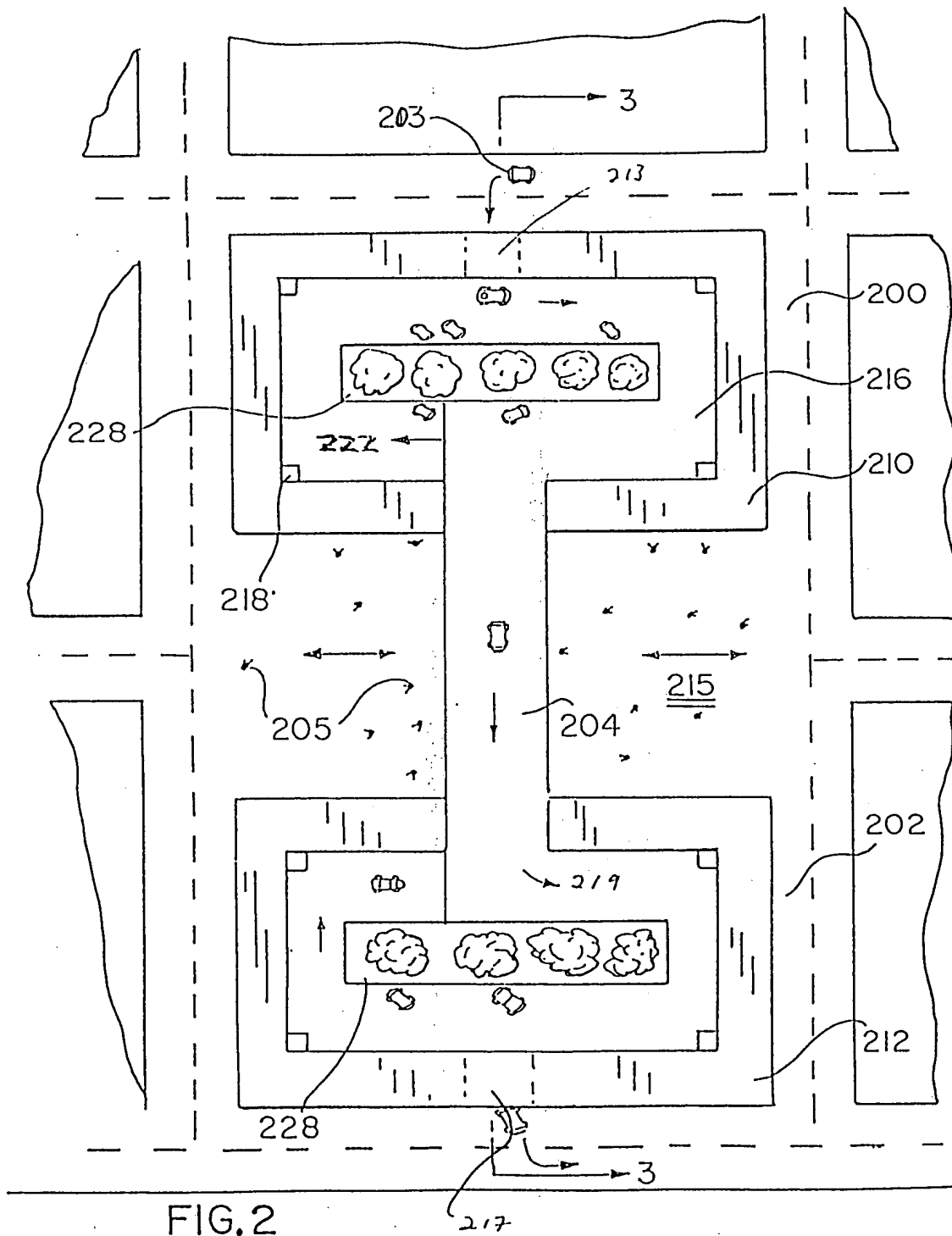
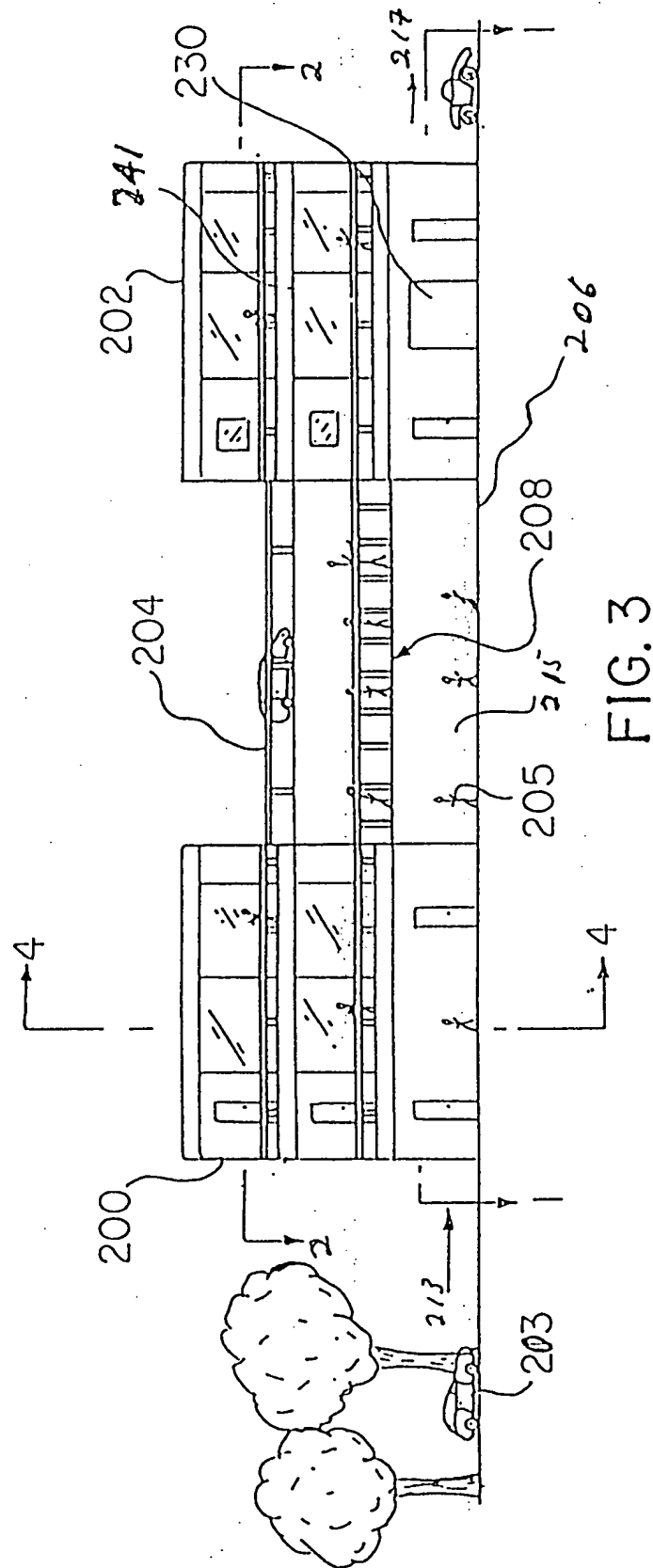


FIG. 1





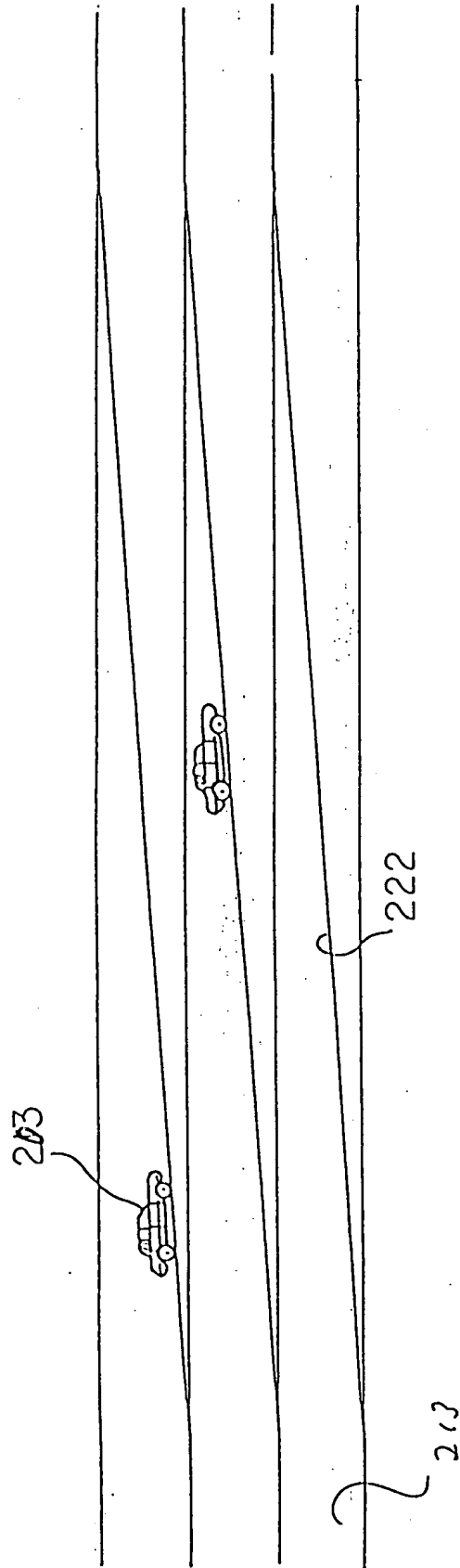


FIG. 4

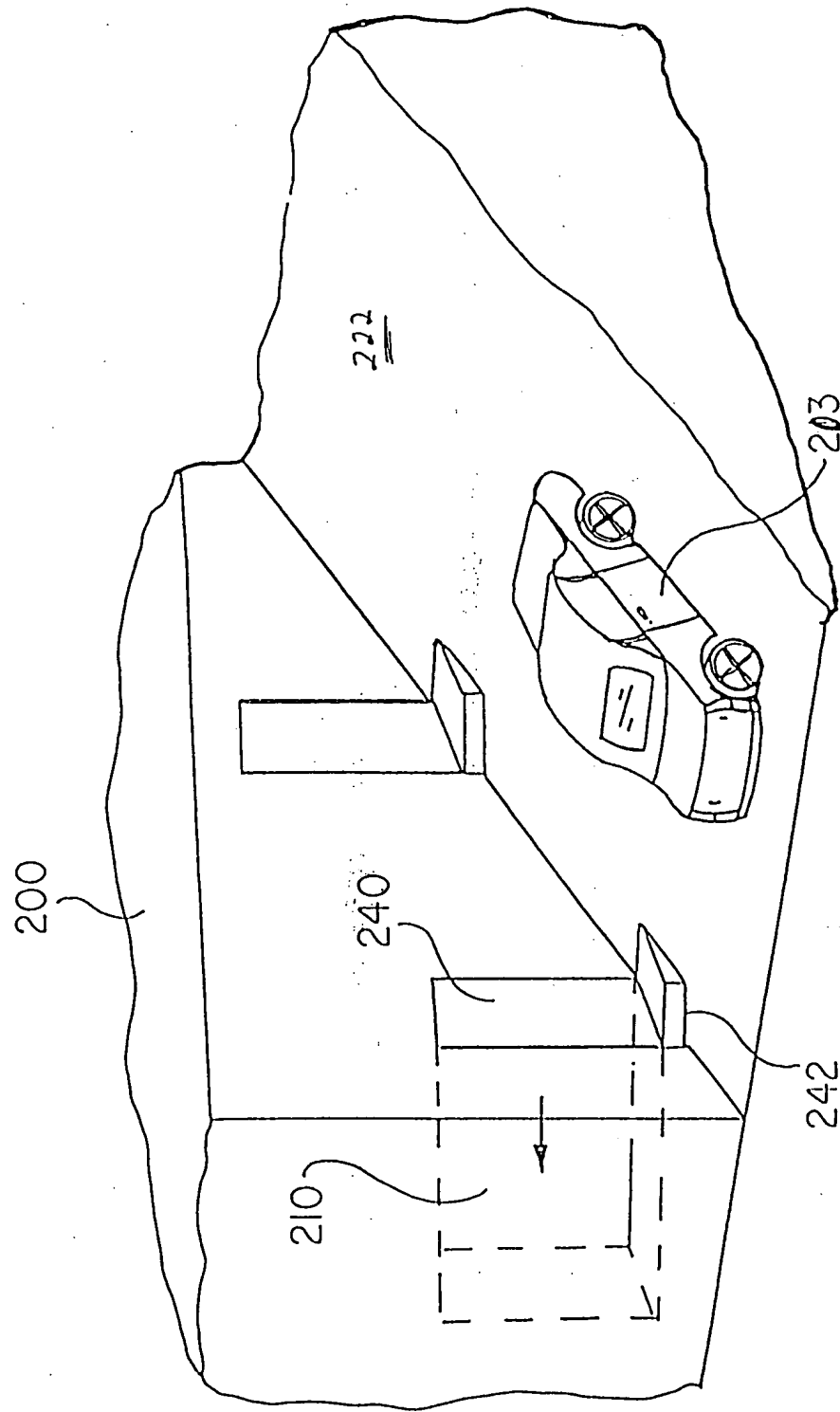
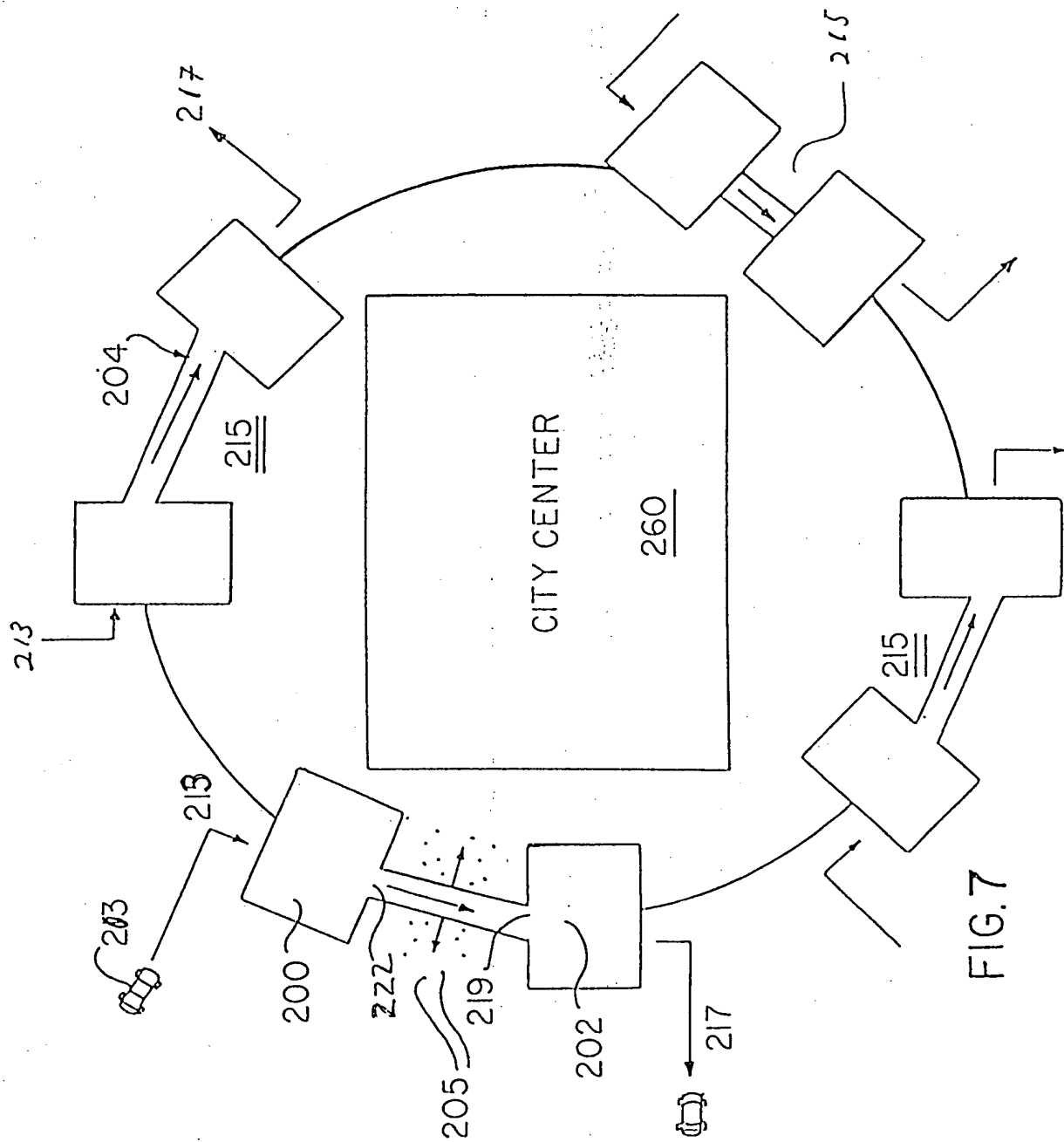


FIG. 5



JC09 Rec'd PCT/PTO 13 JUN 2005

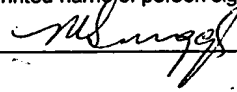
Certificate of Transmission

I hereby certify that, on the date shown below, this correspondence is being facsimile transmitted to the WIPO,
at (41-22) 740.14.35

Marcia Scruggs

Typed or printed name of person signing this certificate

Signature



Date

2/14/05

UNDER THE PATENT COOPERATION TREATY
BEFORE THE INTERNATIONAL SEARCHING AUTHORITY

INTERNATIONAL APPLICATION NO.: PCT/US03/39804

APPLICANT: Gustafson

INTERNATIONAL FILING DATE: 15.12.03

EARLIEST PRIORITY DATE: 13.12.02

TITLE: MIXED USE PEDESTRIAN-ORIENTED PARKING STRUCTURE

AMENDMENT UNDER ARTICLE 19

WIPO
chemin des
Colombettes
1211 Geneva 20
SWITZERLAND

Dear Sir:

Responsive to the International Search Report dated 13 December 2004, kindly
amend the claims as noted herewith and enter the following Remarks of Record.

Cancel without prejudice Claims 5 and 15.

Amend Claims 1 and 11 as noted in the Pages attached herewith.

Amended Claims

THE CLAIMS

Claim 1 (Currently Amended): A mixed-pedestrian-oriented parking structure, comprising:

- (a) At least two sequential multi-level parking units, each having one-directional parking access aisles, at least one of said units provided with a central solid rectangular atrium provided within at least one of said parking units;
- (b) a liner building surrounding said parking units on at least one side of each of said sequential multi-level parking unit; and
- (c) a multi-use buffer corridor defining an interface between said parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said wall including means for access to and from said buffer corridor.

Claim 2 (Original): The structure as recited in Claim 1, further comprising:
at least one exterior pedestrian-oriented corridor between at least one set of said sequential parking units.

Claim 3 (Original): The parking structure as recited in Claim 2, in which said pedestrian-oriented corridor comprises a ground level corridor.

Claim 4 (Original): The parking structure as recited in Claim 2, further comprising:
an interior pedestrian corridor, transverse to said exterior corridor, said interior corridor substantially bisecting said at least two parking units.

Claim 5 (Cancelled): The structure as recited in Claim 1, further comprising:
a central atrium provided within at least one of said parking units.

Claim 6 (Original): The structure as recited in Claim 2, further comprising:
a central atrium provided within the parking units.

Claim 7 (Original): The parking structure as recited in Claim 1 in which said buffer corridor includes HVAC facilities.

Claim 8 (Original): The parking structure as recited in Claim 2, in which said buffer corridor includes HVAC facilities.

Claim 9 (Original): The structure as recited in Claim 6, in which said parking units each comprise:

means for angled parking on a parking deck of each unit, situated about said central atrium.

Claim 10 (Original): The structure as recited in Claim 9 in which said parking units each further comprise:

means for parallel parking along an outer edge of a parking deck of each unit.

Claim 11 (Currently Amended): A mixed-use pedestrian-oriented parking structure, comprising:

(a) at least two multi-level parking units, each having one-directional parking access aisles, at least one of said parking units provided with a central solid rectangular atrium; and

(b) a liner building surrounding said parking units on at least two sides of each parking unit, said liner building including at least one common walls with said parking units, said wall including means for access to and from said liner building.

Claim 12 (Original): The structure as recited in Claim 11, further comprising:
at least one pedestrian-oriented corridor between at least one set of said sequential parking units.

Claim 13 (Original): The parking structure as recited in Claim 11, in which said pedestrian-oriented corridor comprises a ground level corridor.

Claim 14 (Original): The parking structure as recited in Claim 13, further comprising an interior pedestrian corridor, transverse to said ground level corridor and substantially bisecting said at least two parking units.

Claim 15 (Cancelled): The structure in as recited in Claim 12, further comprising:
a central atrium provided within the parking units.

Claim 16 (Original): The parking structure as recited in Claim 12, further comprising:

a multi-use buffer corridor defining an interface between parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said walls including means for access to and from said liner building.

Claim 17 (Original): The structure as recited in Claim 16 in which buffer corridor includes HVAC facilities.

Claim 18 (Original): The structure as recited in Claim 12, in which said linear building includes at least one corridor contiguous with said at least one common wall.

Claim 19 (Original): The structure as recited in Claim 10, further comprising:
a cross-over ramp between said sequential parking units.

Claim 20 (Original): The structure as recited in Claim 12, in which said parking
units each comprise:

means for angled parking on a parking deck of each unit, situated about said
central atrium.

21 (Original): The structure as recited in Claim 11, in which said parking units
each further comprise:

means for parallel parking along an outer edge of a parking deck of each unit.

THE CLAIMS

1. A mixed-use pedestrian-oriented parking structure, comprising:

(a) at least two sequential multi-level parking units, each having one-directional parking access aisle.

(b) a liner building surrounding said parking units on at least one side of each of said sequential multi-level parking unit; and

(c) a multi-use buffer corridor defining an interface between said parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said wall including means for access to and from said buffer corridor.

2. The structure as recited in Claim 1, further comprising:

at least one exterior pedestrian-oriented corridor between at least one set of said sequential parking units.

3. The parking structure as recited in Claim 2, in which said pedestrian-oriented corridor comprises a ground level corridor.

4. The parking structure as recited in Claim 2, further comprising:

an interior pedestrian corridor, transverse to said exterior corridor, said interior corridor substantially bisecting said at least two parking units.

5. The structure as recited in Claim 1, further comprising:

a central atrium provided within at least one of said parking units.

6. The structure as recited in Claim 2, further comprising:

a central atrium provided within the parking units.

7. The parking structure as recited in Claim 1 in which said buffer corridor includes HVAC facilities.

8. The parking structure as recited in Claim 2, in which said buffer corridor includes HVAC facilities.

9. The structure as recited in Claim 6, in which said parking units each comprise:

means for angled parking on a parking deck of each unit, situated about said central atrium.

10. The structure as recited in Claim 9 in which said parking units each further comprise:

means for parallel parking along an outer edge of a parking deck of each unit.

11. A mixed-use pedestrian-oriented parking structure, comprising:
 - (a) at least two multi-level units, each having one-directional parking access aisles;
 - (b) a liner building surrounding said parking units on at least two sides of each parking unit, said liner building including at least one common walls with said parking units, said wall including means for access to and from said liner building.
12. The structure as recited in Claim 11, further comprising:
at least one pedestrian-oriented corridor between at least one set of said sequential parking units.
13. The parking structure as recited in Claim 11, in which said pedestrian-oriented corridor comprises a ground level corridor.
14. The parking structure as recited in Claim 13, further comprising an interior pedestrian corridor, transverse to said ground level corridor and substantially bisecting said at least two parking units.
15. The structure in as recited in Claim 12, further comprising:
a central atrium provided within the parking units.
16. The parking structure as recited in Claim 12, further comprising:

a multi-use buffer corridor defining an interface between parking units and said liner building, said liner building including at least one common wall with said buffer corridor, said walls including means for access to and from said liner building.

17. The structure as recited in Claim 16 in which buffer corridor includes HVAC facilities.

18. The structure as recited in Claim 12, in which said linear building includes at least one corridor contiguous with said at least one common wall.

19. The structure as recited in Claim 10, further comprising:
a cross-over ramp between said sequential parking units.

20. The structure as recited in Claim 12, in which said parking units each comprise:
means for angled parking on a parking deck of each unit, situated about said central atrium.

20. The structure as recited in Claim 11, in which said parking units each further comprise:
means for parallel parking along an outer edge of a parking deck of each unit.